

Project Report
ENDANGERED SPECIES MONITORING
Mississippi River-Gulf Outlet
Bar Channel
Maintenance Dredging
00-1-MRGO

Operations Technical Support Branch
US Army Corps of Engineers
New Orleans District
504-862-2521

Introduction

This report is submitted to fulfill requirements of the Endangered Species Act and the Incidental Take Statement (ITS) "for sea turtle takes resulting from Hopper Dredging activities" dated September 22, 1995. The New Orleans District submits this preliminary report summarizing the results of Fiscal Year (FY) 2000 maintenance dredging of the Mississippi River-Gulf Outlet (MR-GO), Louisiana, bar channel by the Government Dredge MCFARLAND.

The NOD scheduled dredging in the MR-GO bar channel, such that the majority of the maintenance work would be conducted between December 1 and March 30, the time period when sea turtles are predicted to be the least abundant in nearshore gulf waters. However, the dredge McFarland required more time to complete channel maintenance and some work was conducted after March 30. Sea turtle observers were placed on board the dredge and sea turtle monitoring was conducted as necessary from April 1, 2000, to the end of the contract on April 16, 2000.

Scope of Work

Maintenance dredging of the MR-GO bar channel was conducted by the hopper dredge MCFARLAND from Mile (-) 3.3 to Mile (-) 6.9 (Figure 1). The majority of the dredged material was removed between channel Mile (-) 4.3 and Mile (-) 5.5.

A portion of the maintenance dredging activities were conducted during the time period when sea turtle monitoring was required as described in the ITS dated September 22, 1995, and during that time period sea turtle observers were on board the hopper dredge conducting monitoring.

In 1995, and previous years, the National Marine Fisheries Service determined that listed whales are unlikely to be adversely affected by hopper dredging in the Gulf of Mexico. As a result, endangered species monitors for whales, bridge observers, were not required for this contract. Throughout the maintenance event, dredging operations were conducted following the items listed in reasonable and prudent measures 4. and 6. This included advising the Contractor of the potential presence of sea turtles in the navigation channel and reporting and operating requirements.

Methodology

The dredge worked in dredge and haul mode. Material was deposited in the Ocean Dredged Material Disposal Site located south of and parallel to the navigation channel (Figure 1). The MCFARLAND was equipped with 4"x 4" inflow screens and sea turtle observers were on board monitoring for sea turtle takes from April 7, 2000, to April 16, 2000. The screens were inspected for sea turtles and sea turtle parts and cleared by hand of debris. Draghead deflectors were in use throughout dredging operations.

Results

The MCFARLAND worked in the MR-GO bar channel from January 7, 2000, to April 16, 2000. No dredging was conducted during January 24, 2000, and January 28, 2000. Approximately 1,187,245 cubic yards of shoal material was removed by dredge and haul operations.

During this maintenance event there was one documented incidental sea turtle take. A loggerhead sea turtle was taken on April 15, 2000. On April 18, 2000, a dead Kemp's ridley was observed by a hydrographic survey crew in the MR-GO channel (2 days after dredging had ceased in the MR-GO). Throughout the dredging work, both biological and non-biological debris were recovered from the screens. Debris retained in the screens included wood, mud, rocks, bottles, cans, metal canisters, plastic, tin sheeting, nylon harness, and netting. The biological material collected included shells, fish, rays, skates, blue crabs and spider crabs. The results of the screen monitoring are summarized in Table 1.

Water temperatures ranged from a maximum surface water temperature of 78 degrees F (25.6 degrees C) to a minimum surface water temperature of 70 degrees F (21.1 degrees C). Below mid-depth water temperatures were not sampled.

Bridge monitoring was conducted opportunistically.

No screen clogging was reported during dredging activities. The light amount of debris collected may be attributed to the use of draghead deflectors throughout the contract.

Discussion

Temperature conditions during the maintenance event were well within range of sea turtle tolerances. For the duration of maintenance dredging work (January 7, 2000 through April 16, 2000) conducted by the hopper dredge MCFARLAND in the MR-GO, LA, bar channel, one sea turtle take, a loggerhead sea turtle, was recorded on April 15, 2000. On April 18, 2000, a dead Kemp's ridley was observed by a hydrographic survey crew in the MR-GO channel (2 days after dredging had ceased in the MR-GO). This sea turtle mortality was not attributed to the hopper dredging activity in the bar channel. There were shrimping activities being conducted in the area at the time of discovery of the dead turtle.

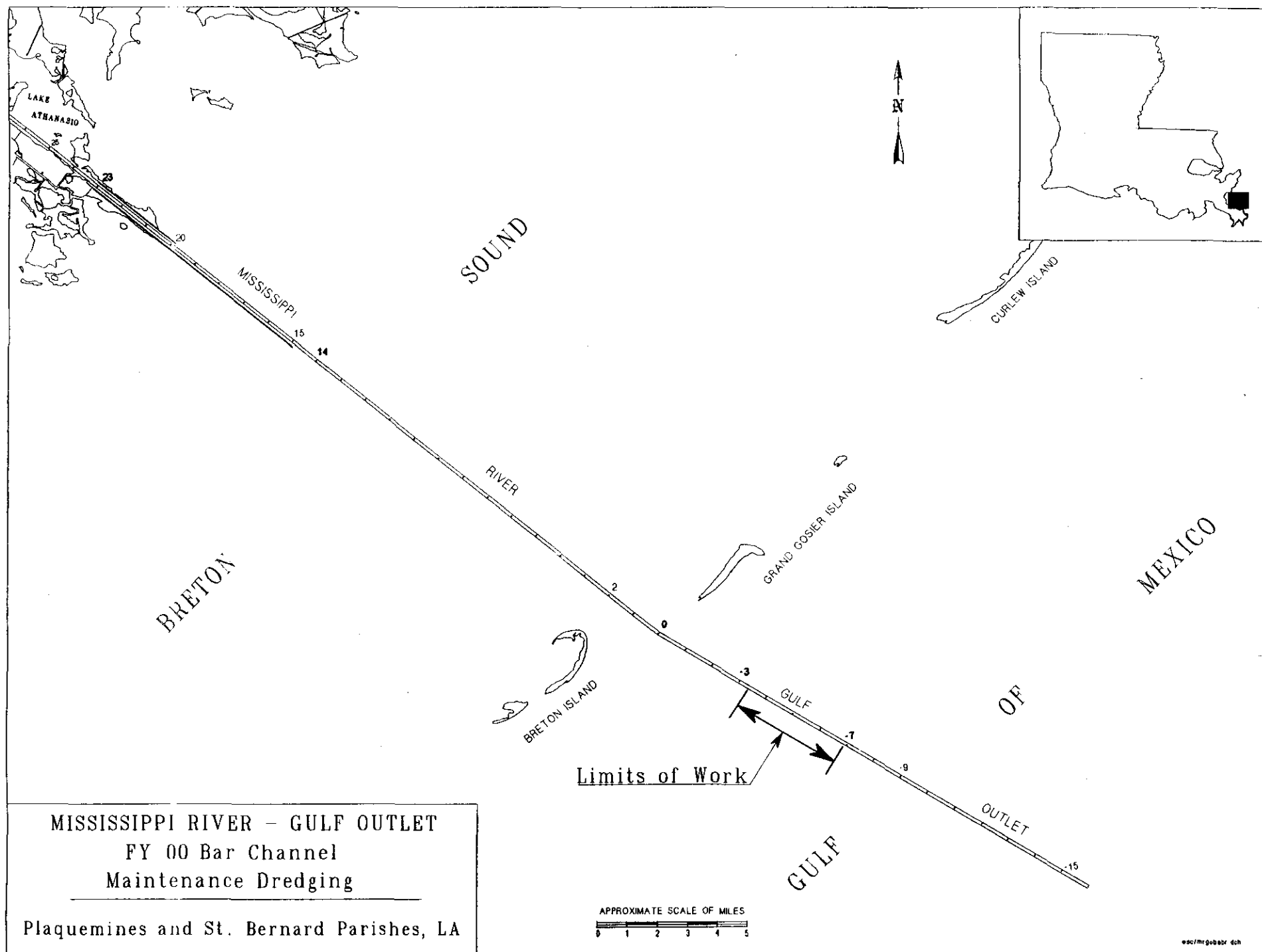


Table 1. McFarland Sea Turtle Observer Reports

DATE	DREDGE	NOTES
7 April 2000	McFarland	Screens: wood, bottle Below Mid-Depth Temp: Surface Temp: 78 Weather: clear, S & SW @ 10 kts, BSS 2' Other:
8 April 2000	McFarland	Screens: wood, metl canisters, logs, boulders, snail shell, bottle, mud, fish, shells Below Mid-Depth Temp: Surface Temp: 70-78 F Weather: clear, overcast, p/cloudy, S, SW, NE & NW 10-30 kts, BSS 4-6' Other:
9 April 2000	McFarland	Screens: can, log, mud, plastic sheet, snail shell, skate wing, skate, shell, stingray, wood Below Mid-Depth Temp: Surface Temp: 70 F Weather: clear, N, E, 10-30 kts, BSS 1-6' Other:
10 April 2000	McFarland	Screens: tin can, mud balls, wood, log, mud, rocks, shells, tin sheet Below Mid-Depth Temp: Surface Temperature: 70-74 F Weather: clear, p/cloudy, cloudy, E, NE, SE, winds 10-20 kts, BSS 1-4' Other:
11 April 2000	McFarland	Screens: blue crab, sheepshead, stingray, skate, crab, wood, spider crab, shells, netting Below Mid-Depth Temp: Surface Temp: 73-74 F Weather: cloudy, p/cloudy, hazy, overcast, ESE, SE, NE & N winds 10-15 kts Other:
12 April 2000	McFarland	Screens: shells, wood, fish, snail shells, nylon harness, sheepshead, blue crab Below Mid-Depth Temp: Surface Temp: 73-74 F Weather: p/cloudy, hazy, clear, SE, N, S, NW winds 8-20 kts, BSS 4-5 Other:
13 April 2000	McFarland	Screens: Below Mid-Depth Temp: Surface Temp: 74 F Weather: clear, SE winds 10 kts, BSS 2' Other:

14 April 2000	McFarland	Screens: can Below Mid-Depth Temp: Surface Temp: 70 F Weather: rain, p/cloudy, SE 5-20 K, BSS 2-3' Other:
15 April 2000	McFarland	Screens: shells, snail, blue crab, wood, spider crab Below Mid-Depth Temp: Surface Temp: 70 F Weather: p/cloudy, rain, clear, SE, W, ENE 5-20 kts, BSS 2-5' Other:
16 April 2000	McFarland	Screens: Below Mid-Depth Temp: Surface Temp: 70 F Weather: clear, SE winds 5 kts, BSS 2' Other:

APPENDIX B

SEA TURTLE REPORTING LOG FOR HOPPER DREDGE OPERATIONS

PROJECT: MISSISSIPPI RIVER GULF OUTLET CONTRACT NO: _____
(747) VESSEL NAME: McFARLAND FIRM NAME: USACE
LOAD NUMBER: 76 LOADING START TIME (24 HR): 0305 DATE: 4/15/00
DRAGHEAD DEFLECTOR USED? YES ☒ NO DEFLECTOR CONDITION: UNK
WEATHER CONDITIONS: RAIN SE @ 15K 80-84
WATERWAY TEMP (OF): SURFACE: 70 MID-DEPTH TO WATER BOTTOM: _____

SCREEN WATCH: 1800-0600SCREEN TYPE: IN-FLOW: ☒ OVER-FLOW: _____

PORT SCREEN CONTENTS: _____

STARBOARD SCREEN CONTENTS: _____

TURTLE OR TURTLE PARTS PRESENT THIS LOAD?: YES ☒ NO _____

COMMENTS AND OBSERVATIONS: _____

DRAFT 22.6NAME OF SCREEN WATCH OBSERVER: ARVIDAS POSITKUSOBSERVER'S SIGNATURE: Arvidas Positkus

DATA ON TURTLES RETAINED IN HOPPER:

SPECIES POSSIBLE LOGGERHEAD - COSTAL SCUTE SECTION OF CARAPACEHEAD WIDTH: UNKNOWN PLASTRON LENGTH UNKNOWN

CARAPACE S.L. LENGTH: _____ CARAPACE S. L. WIDTH _____

CARAPACE O.C. LENGTH: _____ CARAPACE O.C. WIDTH _____

SPECIMEN CONDITION: ALIVE: _____ DEAD: ☒ INJURED: _____ OTHER: _____FRESH PIECE, SMALL AMOUNT OF BLOOD IN POROUS BONY MATERIAL, LIVE BARNICLES

TURTLE INITIALLY TAGGED? YES: _____ NO: _____ TAG NO: _____

TAG DATE: _____ TURTLE RELEASED WITH TAG? YES: _____ NO: _____

COMMENTS AND OBSERVATIONS: 2 PHOTOS TAKEN. POSSIBLY LARGELOGGERHEAD TURTLE, ONLY 1 PIECE FOUND. REDDISH BROWNCOLOR0425 Dumped

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